

SECRET

29

CIA/RR CB 60-43

Copy No. _____
12 August 1960

ST/PB/C

CURRENT SUPPORT BRIEF

PLANS FOR EXPANDING THE OUTPUT OF NONFERROUS METALS IN RUMANIA

OFFICE OF RESEARCH AND REPORTS

CENTRAL INTELLIGENCE AGENCY

This report represents the immediate views of the originating intelligence components of the Office of Research and Reports. Comments are solicited.

W - A - R - N - I - N - G

This document contains information affecting the national defense of the United States, within the meaning of the espionage laws, Title 18 USC, Sections 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

SECRET

SECRETPLANS FOR EXPANDING THE OUTPUT OF NONFERROUS METALS IN RUMANIA

The development of the nonferrous metals industry in Rumania as envisioned by Communist planners has been disclosed for the first time in the plan for the country's economic development. Not only is the output of copper, lead, and zinc to be increased substantially, but the extraction of primary aluminum from domestic bauxite is to be undertaken also. The plan consists of "directives" for 1960-65 and an outline for a 15 or 20 year program that is being developed in collaboration with the USSR, probably through the Council of Mutual Economic Assistance (CEMA). The plan was published in May and approved in June, presumably without major revision, by the Third Congress of the Rumanian Workers Party. 1/

With the single exception of lead production in 1950 and 1955, the output of nonferrous metals in Rumania has not been revealed. Nevertheless, the country, which is the second largest of the European Satellites in area, possesses a variety of nonferrous mineral resources. Copper, lead, zinc, gold, mercury, and low-grade bauxite are known to be produced, but exploitation thus far is believed to have been limited and past references to possible plans for development have been vague.

Planned Objectives

In 1965, according to the directives, Rumania is to be self-sufficient in aluminum, lead, and zinc and more nearly so in copper--in spite of steadily rising domestic requirements. By the end of six years, the annual output of copper is to be quadrupled, that of lead and zinc about doubled, and primary aluminum is to be produced at a rate of 20,000 or 30,000 tons a year. Except for aluminum, however, specific goals have not been disclosed. In addition, capacity for semifabricating nonferrous metals is to be expanded correspondingly. By 1975, moreover, the output of nonferrous metals is to be five times greater than in 1959, and the capacity of the projected aluminum plant is to be about twice as large as that planned for 1965.

Accordingly, Rumania not only is to participate in the general expansion of the nonferrous industry that currently is under way among the European Satellites, but also is to produce a more significant proportion of the total output of the area. Estimated output of copper, lead, and zinc in 1959, computed goals for these metals for 1965, and the stated goal for aluminum for 1965, together with the percentages these figures represent of the totals estimated for all the European Satellites, are given in the following Table.

12 August 1960

CIA/RR-CB 60-43

Page 2

SECRET

SECRET

Table

**ESTIMATED PRODUCTION OF NONFERROUS METALS IN RUMANIA
1959 AND 1965**

| | 1959 | | 1965 | |
|----------|--|--|---|--|
| | Estimated Output a/ (1,000 metric tons) | Approximate Percent Total EuSat Output b/ | Planned Output (1,000 metric tons) | Approximate Percent Total EuSat Output d/ |
| Copper | 4 | 5 | 16 c/ | 12 |
| Lead | 15 | 12 | 30 c/ | 14 |
| Zinc | 10 | 5 | 24 c/ | 7 |
| Aluminum | 0 | 0 | 20-30 | 8-11 |

a. 2/

b. Based on estimated production for all European Satellites. 3/

c. Planned increases over output estimated for 1959 were computed in accordance with the plan directives which were stated as follows: "Copper more than 4 times, lead more than 2 times, and zinc more than 2.4 times."

d. Based on planned or projected output for all European Satellites. 4/

Feasibility of Plans

The assumption that adequate supplies of the various factors of production are obtainable is implicit in the Rumania plan. Inasmuch as availability of these factors in sufficient quantity within the time period of the 1960-65 directives is questionable, the goals announced may be long-term intentions rather than defined short-term projects. The Rumanian announcement itself calls this first phase of the long-range plan a "grandiose program."

An assumption also has been made that all necessary resources will be properly allocated and fully utilized. Production objectives are to be realized by:

1. Increasing the output of ore by more efficient exploitation of known reserves and the location of additional ones.
2. Substantially raising metal recovery by means of more efficient ore preparation and improved metallurgical techniques.
3. Re-equipping and modernizing existing facilities and building needed new plants.

According to the directives, the most modern and efficient techniques of production are to be introduced and extended, including the use of automation, mechanization, and current scientific research. Thus, across-the-board increases in factor productivity and reductions in production costs are to be achieved.

SECRET

SECRET

Specific provision for investment in new capacity is not made in the directives. Such expenditures are to be kept at a minimum primarily by fully utilizing existing capacity. The building of new facilities is to be authorized only when scheduled levels of output cannot be met otherwise. Present output of copper, lead, and zinc in Rumania probably can be expanded somewhat without substantial capital investment, but achievement of estimated 1965 production plans will require additional producing capacity. 5/

Production of primary aluminum from domestic bauxite presents major problems for Rumania. The use of indigenous raw material appears dubious, as the quality of ore mined so far has not been economically suitable for reduction to metal, and the existence of high-quality bauxite has not been claimed. New installations for reducing bauxite to alumina and alumina to metal will have to be built and put into operation. The building of such facilities, however, is purported to be the main project of the nonferrous industry during the next six years. Because of lack of data, the cost of constructing facilities necessary for producing primary aluminum in Rumania cannot be estimated. In the US, however, construction of a 20,000-ton-per-year potline is estimated to cost in the neighborhood of \$14 million, exclusive of facilities for producing alumina, the intermediate product between bauxite and metal. This figure does not include the cost of providing adequate power. 6/ Provision for a dependable supply of the necessary electricity presents another serious problem. In light of the difficulties involved and attendant high costs, therefore, development of a primary aluminum industry in Rumania by 1965 hardly seems feasible.

Although in time Rumania may be able to approach self-sufficiency in the major nonferrous metals, production targets for 1965 probably will not be attained as scheduled. Ambitious goals for the next six years have been planned for all important industrial sectors, and Rumania is beset with shortages of capital equipment and necessary skills. Significant expansion in the area of nonferrous metals, therefore, is apt to take place relatively slowly.

SECRET

Next 5 Page(s) In Document Exempt